

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark
Office
(Box PCT)
Crystal Plaza 2
Washington, DC 20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 03 March 1997 (03.03.97)	
International application No. PCT/GB96/01773	Applicant's or agent's file reference
International filing date (day/month/year) 24 July 1996 (24.07.96)	Priority date (day/month/year) 26 July 1995 (26.07.95)
Applicant HALL, Harold	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

14 February 1997 (14.02.97)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer H. Zhou</p> <p>Telephone No.: (41-22) 730.91.11</p>
--	---

PATENT COOPERATION TREATY

PCT

REC'D 14 AUG 1997

WIPO

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT



(PCT Article 36 and Rule 70)

Applicant's or agent's file reference -	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB 96/01773	International filing date (day, month, year) 24/07/1996	Priority date (day, month, year) 26/07/1995
International Patent Classification (IPC) or national classification and IPC B03C1/033		
Applicant MARLOWE, John et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of six sheets, including this cover sheet.
- ☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consists of a total of three sheets.

3. This report contains indications and corresponding pages relating to the following items:
- I ☒ Basis of the report
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☒ Certain defects in the international application
 - VIII ☒ Certain observations on the international application

Date of submission of the demand 14/02/1997	Date of completion of this report 12.08.97
Name and mailing address of the IPEA/  European Patent Office D-80298 Munich Tel. (+49-89) 2399-0, Tx: 523656 epmu d Fax: (+49-89) 2399-4465	Authorized officer  Ch. Tompouloglou Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT**I. Basis of the report**

1. This report has been drawn up on the basis of (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.):

☐ the international application as originally filed.

☒ the description, pages 1-7 _____, as originally filed,
pages _____, filed with the demand,
pages _____, filed with the letter of _____,
pages _____, filed with the letter of _____.

☒ the claims, Nos. _____, as originally filed,
Nos. _____, as amended under Article 19,
Nos. _____, filed with the demand,
Nos. 1-11 _____, filed with the letter of 25/7/97_,
Nos. _____, filed with the letter of _____.

☒ the drawings, sheets/fig 1/3-3/3 _____, as originally filed,
sheets/fig _____, filed with the demand,
sheets/fig _____, filed with the letter of _____,
sheets/fig _____, filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

☐ the description, pages _____.
☐ the claims, Nos. _____.
☐ the drawings, sheets/fig _____.

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

Intern. application No.
PCT/GB96/01773

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement

1. STATEMENT

Novelty (N)	Claims 1-11_____	YES
	Claims _____	NO
Inventive Step (IS)	Claims 1-11_____	YES
	Claims _____	NO
Industrial Applicability (IA)	Claims 1-11_____	YES
	Claims _____	NO

2. CITATIONS AND EXPLANATIONS

1. D1: US-A-2149764 is the closest prior art and discloses: a device (5) for filtering ferromagnetic material from a fluid in which said material is suspended, comprises a magnet (9) and a pair of metal plates (8), said magnet having faces of opposite magnetic polarity, said plates being disposed in abutment with said faces respectively (fig. 19, each plate having a plurality of recesses (22) about an outer perimeter of the plate to form radially extending magnetic pole pieces, which extend beyond an outer perimeter of the magnetic faces (fig. 1), said plates being oriented so that the recesses and pole pieces on one plate are axially aligned with those recesses and pole pieces on the other plate (fig. 1), wherein axially opposite recesses define passage means for said fluid and also regions from which ferromagnetic material is repelled, and wherein said pole pieces define regions to which ferromagnetic material is attracted and retained (page 2, left column). said device being further provided with a distribution plate (uppermost plate (8)) having a plurality of aper-

tures which are axially alignable with said recesses, said apertures being the only passage means of fluid to said metal plates.

2. Problem: To increase the separation efficiency in this context.
3. Solution: The tube according to the characterising portion of the independent claim isolates the input of the device from the clean product.
4. The threaded tube (18) disclosed in D3: US-A-5389252 is intended only as an exit of the clean product.

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

1. Reference signs in parentheses should have been inserted in the claims to increase their intelligibility, Rule 6.2(b) PCT. This applies to both the preamble and characterising portion.
2. To meet the requirements of Rule 5.1(a)(ii) PCT, the documents D1, D2: FR-A-1114135 and D3 should be identified in the description and the relevant background art disclosed therein should be briefly discussed.

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. Claim 11 includes all features of claim 1 and should therefore have been drafted as dependent claim (Rule 6.4(a)-(c) PCT).

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/GB 96/ 01773	24/07/1996	26/07/1995
Applicant		
MARLOWE, John		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (see Box I).

2. ☐ Unity of invention is lacking (see Box II).

3. ☐ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing

☐ filed with the international application.

☐ furnished by the applicant separately from the international application,

☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.

☐ Transcribed by this Authority

4. With regard to the title, ☒ the text is approved as submitted by the applicant

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is:

Figure No. 1 ☒ as suggested by the applicant.

☐ None of the figures.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 96/01773

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 B03C1/033 B01D35/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 B03C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US,A,2 149 764 (J.R.FREI) 7 March 1939 see column 1, line 51 - column 2, line 7; claims 1-3; figures 1-3 ---	1,2,6,8 3
X	FR,A,1 114 135 (N.V.PHILIPS GLOEILAMPENFABRIEKEN) 9 April 1956 see page 1, column 2, paragraph 7 - page 2, column 1, paragraph 1; figure 1 ---	1
A	GB,A,684 052 (H.SPODIG) 10 December 1952 see page 3, line 40 - line 86; claims 1,4,7; figure 17 ---	1,5
A	US,A,5 389 252 (MORRICK ROBERT A) 14 February 1995 see column 2, line 15 - column 3, line 47; claims 1,3; figures 1-3 -----	1-3,11, 13

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

4 November 1996

Date of mailing of the international search report

0 8. 11. 96

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+ 31-70) 340-3016

Authorized officer

Decanniere, L

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 96/01773

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A-2149764	07-03-39	NONE	
FR-A-1114135		NONE	
GB-A-684052		NONE	
US-A-5389252	14-02-95	NONE	